

## IN THE CLAIMS

*This version of the claims replaces and supercedes all prior versions of the claims.*

1. (Currently Amended) In a cellular telephone system, a[[A]] method of determining the amount of signal power and interference power in a received signal, the received signal having a wanted signal and a plurality of interfering signals, the wanted signal being encoded such that there is a channel structure including a data channel and a broadcast channel, the method comprising the steps of:

- a) selecting a plurality of first known structures in the wanted signal, said plurality of first known structures being identified using a further known structure within the broadcast channel to provide a signal having known periods with defined properties the wanted signal;
- b) processing the received signal in accordance with said plurality of first known structures to derive a set of amplitude values corresponding to the said first known structures; and
- c) using the set of amplitude values to determine the power level for at least a portion of the received signal.

2. Cancelled.

3. (Previously Presented) A method according to claim 1, wherein and step a) includes identifying locations of a further structure within the wanted signal, and using the identified locations to derive the locations of said plurality of first known structures.

4. (Previously Presented) A method according to claim 1, wherein said plurality of first known structures comprises Frequency Correction Bursts.
5. (Original) A method according to claim 3, wherein said further known structure comprises sync bursts.
6. (Previously Presented) A method according to claim 1, wherein the step of identifying said plurality of first known structures includes using pointers selected by said further known structure.
7. (Original) A method according to claim 6, wherein said pointers are stored in a look-up table, and step a) includes using said pointers to select said plurality of first known structures in said received signal.
8. (Previously Presented) A method according to claim 7, wherein step b) comprises correlating the received signal with said selected plurality of first known structures to derive said amplitude values.
9. (Previously Presented) A method according to claim 8, wherein step c) comprises determining mean and variance values for said amplitude values.
10. (Previously Presented) A method according to claim 9, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.
11. (Original) A method according to claim 10, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.

12. (Previously Presented) A method according to claim 3, wherein the step of identifying said plurality of first known structures includes using pointers selected by said further known structure.

13. (Previously Presented) A method according to claim 12, wherein said pointers are stored in a look-up table, and step a) includes using said pointers to select said plurality of first known structures in said received signal.

14. (Previously Presented) A method according to claim 13, wherein step b) comprises correlating the received signal with said selected plurality of first known structures to derive said amplitude values.

15. (Previously Presented) A method according to claim 14 wherein step c) comprises determining mean and variance values for said amplitude values.

16. (Previously Presented) A method according to claim 15, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.

17. (Previously Presented) A method according to claim 16, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.

18. (Previously Presented) A method according to claim 1, wherein step b) comprises correlating the received signal with said selected plurality of first known structures to derive said amplitude values.

19. (Previously Presented) A method according to claim 18, wherein step c) comprises determining mean and variance values for said amplitude values.
20. (Previously Presented) A method according to claim 19, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.
21. (Previously Presented) A method according to claim 20, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.
22. (Previously Presented) A method according to claim 1, wherein step c) comprises determining mean and variance values for said amplitude values.
23. (Previously Presented) A method according to claim 22, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.
24. (Previously Presented) A method according to claim 23, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.
25. (Previously Presented) A method according to claim 1, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.
26. (Previously Presented) A method according to claim 25, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.